UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,493	11/14/2003	Gary Edward Trewiler	134314	9211

23465 7590 09/08/2006

JOHN S. BEULICK
C/O ARMSTRONG TEASDALE, LLP
ONE METROPOLITAN SQUARE
SUITE 2600
ST LOUIS, MO 63102-2740

EXAMINER	
LE, HUNG CHARLIE	
ART UNIT	**PAPER NUMBER**
3663	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/713,493	TREWILER ET AL.	
	Examiner	Art Unit	
	Hung C. Le	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 20* is/are pending in the application.

4a) Of the above claim(s) *8 - 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/09/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's election with traverse of species A and subspecies of cutting through a rotor blade (Claims 1 – 7 readable thereon) is acknowledged.

2. Applicant's arguments, see "Response to restriction requirement", filed 06/12/2006, with respect to claims 1 – 20 have been fully considered.

Applicant's traversal of the species election requirement was on the grounds that the species are "related". Applicant also alleged that a search and examination of all claims would not place a serious burden on the examiner.

These reasons are not found persuasive because species belonging to one genus are related but it does not follow that they are not patentable distinct.

Also, contrary to the requirement in Office Action dated May 26, 2006, applicant did not submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on record that this is the case. Also, contrary to applicant's allegation, each of the identified species would require a separate search in view of their mutually exclusive characteristics, and these individual searches would neither be the same nor co-extensive.

Accordingly, the election requirement is deemed proper and is therefore made

FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "...predetermined aerodynamic contour..." is a relative term. It is not known what all is meant and encompassed by the term predetermined.

The term "...substantially mirroring..." is a relative term. It is not known what all is meant and encompassed by the term.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "...substantially mirrors..." is a relative term. It is not known what all is

meant and encompassed by the term.

6. Claim 5 recites the limitation "the same" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 7 are rejected under 35 U.S.C. 102(b) as being anticipated by either Meier et al. (US 6,438,838 B1) or Hellemann et al. (US 6,568,077 B1).

With respect to claim 1: Meier et al. (Abstract, Figs 1 – 4) discloses: A method for replacing a portion of a gas turbine engine rotor blade, the rotor blade having a contour defined by a blade first sidewall and a blade second sidewall, said method comprising:

cutting through the rotor blade such that a cut line extends from a leading edge of the blade to a trailing edge of the blade, and between the first sidewall and the

second sidewall; and such that the cut line extends at least partially through a hollow portion of the blade defined between the first and second sidewalls;

removing the portion of the rotor blade that is radially outward of the cut line; and

coupling a replacement blade portion to remaining blade portion such that a newly formed rotor blade is formed with a predetermined aerodynamic contour that is one of an improvement in an aerodynamic performance over the original blade contour and substantially mirroring the original blade contour..

Hellemann et al. (Abstract, Figs. 1 – 7) discloses: A method for replacing a portion of a gas turbine engine rotor blade, the rotor blade having a contour defined by a blade first sidewall and a blade second sidewall, said method comprising:

cutting through the rotor blade such that a cut line extends from a leading edge of the blade to a trailing edge of the blade, and between the first sidewall and the second sidewall; and such that the cut line extends at least partially through a hollow portion of the blade defined between the first and second sidewalls;

removing the portion of the rotor blade that is radially outward of the cut line; and

coupling a replacement blade portion to remaining blade portion such that a newly formed rotor blade is formed with a predetermined aerodynamic contour that is one of an improvement in an aerodynamic performance over the original blade contour and substantially mirroring the original blade contour..

While patent drawings are not drawn to scale, relationships clearly shown in the

drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

With respect to claim 2: Meier et al. (Abstract, Figs 1 – 4) further discloses: wherein coupling a replacement blade portion further comprises welding the replacement blade portion to the remaining blade.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein coupling a replacement blade portion further comprises welding the replacement blade portion to the remaining blade.

With respect to claim 3: Meier et al. (Abstract, Figs 1 – 4) further discloses: machining the weld such that the newly formed rotor blade has a contour that substantially mirrors that of the original blade contour.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: machining the weld such that the newly formed rotor blade has a contour that substantially mirrors that of the original blade contour.

With respect to claim 4: Meier et al. (Abstract, Figs 1 – 4) further discloses: automatically welding the replacement blade portion to the remaining blade portion.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: automatically welding the replacement blade portion to the remaining blade portion.

With respect to claim 5: Meier et al. (Abstract, Figs 1 – 4) further discloses: wherein coupling a replacement blade portion further comprises coupling a replacement blade portion to the remaining blade portion that is fabricated from a material that is the same material used in fabricating the original rotor blade.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein coupling a replacement blade portion further comprises coupling a replacement blade portion to the remaining blade portion that is fabricated from a material that is the same material used in fabricating the original rotor blade.

With respect to claim 6: Meier et al. (Abstract, Figs 1 – 4) further discloses: wherein cutting through the rotor blade comprises cutting through a turbine rotor blade.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein cutting through the rotor blade comprises cutting through a turbine rotor blade.

With respect to claim 7: Meier et al. (Abstract, Figs 1 – 4) further discloses: wherein coupling a replacement blade portion to a remaining blade portion further comprises coupling the replacement blade portion to the remaining blade portion using a single

weld joint extending along the cut line.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein coupling a replacement blade portion to a remaining blade portion further comprises coupling the replacement blade portion to the remaining blade portion using a single weld joint extending along the cut line.

9. The statements of intended use or field of use, e.g., "for replacing, etc..." clauses are essentially method limitations or statements or intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

> A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647
>
> Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.
>
> Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung C. Le whose telephone number is 571-272-8757. The examiner can normally be reached on M-F: 07:30am - 05:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

HCL
06/28/06

THOMAS BLACK
SUPERVISORY PATENT EXAMINER